

CHERKASOV, P. K.

Cherkasov, P. K. "Roofing with slag insulation", (With editorial comment), Byulleten 'stroit. tekhniki, 1948, No. 24, p. 18-22.

SO: U-2888, 12 Feb. 53, (Letopis' Zhurnal 'nykh Statey, No. 2, 1949).

CHERKASOV, P. K.

TYUTYUNNIKOV, B. N., BUKHSHSTAB, Z. I., CHERKASOV, P. K.

Lacquer and Lacquering.

Experience in applying bituminous lacquer trade mark IJZHNI, Stroi.
prom., no. 1, 1952.

9. Monthly List of Russian Accessions, Library of Congress, March 195²/₃, Uncl.

CHERNASOV, P.I., otvetstvennyy za vypusk; PEVZNER, A.S., redaktor
izdatel'stva

[Uniform norms and estimates for construction and repair work for
buildings of the second group] Edinye normy i ratsenki na stroitel'-
nye i montazhnye raboty dlia stroek vtoroi gruppy. Kiev, Gos. izd-vo
lit-ry po stroit. i arkhitekture USSR. [Monolithic, plain, and
reinforced concrete construction of buildings and industrial instal-
lations] Monolitnye betonnye i zhelezobetonnye konstruksii zdani i
promyshlennykh sooruzhenii, 1956. 63 p. (MLPA 10:2)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam
stroitel'stva.
(Concrete construction)

CHERTASOV, P.K., otvetstvennyy za vypusk; VOLKOV, V.S., tekhnicheskiy
redaktor

[Uniform norms and estimates for construction and repair work for
buildings of the second group] Edinye normy i ratsenki na stroitel'-
nye i montazhnye raboty dlia stroek vtoroi gruppy. Kiev, Gos. izd-vo
lit-ry po stroit. i arkhitekture USSR. Sec.1. [Transportation work]
Transportnye raboty. 1956. 45 p. (MLRA 10:2)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam
stroitel'stva.
(Transportation)

CHERKASOV, P.K. otvetstvennyy za vypusk; TOKER, A.M., tekhnicheskii
redaktor

[Uniform norms and estimates for construction and repair work for
buildings of the second group] Edinye normy i ratsenki na stroitel'-
nye i montazhnye raboty dlia stroek vtoroi gruppy. Kiev, Gos. izd-vo
lit-ry po stroit. i arkhitekture USSR. Sec. 6. [Welding work] Svaroch-
nye raboty. 1956. 62 p. (MIRA 10:2)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam
stroitel'stva.
(Welding)

CHEKASOV, P.K., otvetstvennyy za vypusk

[Uniform norms and estimates for construction and repair work for buildings of the second group] Edinye normy i raspisaniya na stroitel'nye i montazhnye raboty dlia stroek vtoroi gruppy. Kiev, Gos. izd-vo lit-ry po stroit. i arkhitekture USSR. Sec.19.[Industrial furnaces and ducts] Promyshlennyye pechi i truby. Izd. 2-oe. 1956. 45 p.

(MLRA 10:2)

1. Russia (1923-
stroitel'stva.

(Furnaces)

U.S.S.R.) Gosudarstvennyy komitet po delam

(Chimneys)

CHERKASOV, P.K., otvetstvennyy za vypusk; PEVZNER, A.S., redaktor
izdatel'stva; MEDVEDEV, L.Ya., tekhnicheskiy redaktor

[Uniform norms and estimates for construction and repair work for
buildings of the second group] Edinye normy i ratsenki na stroitel'-
nye raboty dlia stroek vtoroi gruppy. Kiev, Gos. izd-vo lit-ry po
stroit. i arkhitekture USSR. Sec.22 [Railroad ballast sections for
general use] Verkhnee stroenie zheleznodorozhnykh putei obshchego
pol'zovaniia. Izd. 2-oe. 1956. 51 p. (MIRA 10:2)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam
stroitel'stva.
(Ballast)

CHEKASOV, P.K., otvetstvennyy za vypusk; PEVZNER, A.S., redaktor
izdatel'stva; MEDVEDEV, L.Ya., tekhnicheskiy redaktor; TOKER, A.M.,
tekhnicheskiy redaktor

[Uniform norms and estimates for construction and repair work for
buildings of the second group] Edinye normy i rastsenki na stroitel'-
nye i montazhnye raboty dlia stroek vtoroi gruppy. Kiev, Gos. izd-vo
lit-ry po stroit. i arkhitekture USSR. Sec. 25 [Reinforced concrete
and stone bridges and culverts] Zhelezobetonnye i kamennye mosty i
truby. Izd. 2-oe. 1956. 53 p. (MLRA 10:2)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam
stroitel'stva.
(Bridges) (Culverts)

CHERKASOV, P.K. otvetstvennyy za vypusk; PEVZNEH, A.S., redaktor
izdatel'stva

[Uniform norms and estimates for construction and repair work for
buildings of the second group] Edinye normy i rastsenki na stroitel'-
nye i montazhnye raboty dlia stroek vtoroi gruppy. Kiev, Gos. izd-vo
lit-ry po stroit. i arkhitekture USSR. Sec.36 [Preparation of stone,
gravel and sand; the production of facing tile and shaped stone]
Zagotovka kamnia, graviia i peska, izgotovlenie oblitsovochnykh plit
i fasonnykh kamei. 1956. 55 p. (MLRA 10:2)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam
stroitel'stva.
(Building materials)

CHERKASOV, P.K., otvetstvennyy za vypusk; PEVZNEH, A.S., redaktor
izdatel'stva; PERSON, M.H., tekhnicheskiiy redaktor

[Uniform norms and estimates for construction and repair work for buildings of the second group] Edinye normy i rastsenki na stroitel'-nye i montazhnye raboty dlia stroek vtoroi gruppy. Kiev, Gos. izd-vo lit-ry po stroit. i arkhitekture USSR. Ser.37 [Production of semi-finished elements and parts for plain and reinforced concrete construction] Izgotovlenie polufabrikatov i detalei dlia betonnykh i zhelezobetonnykh konstruktsii. Izd. 2-oe. 1956. 55 p. (MIRA 10:2)

1. Russia (1923)- U.S.S.R.) Gosudarstvennyy komitet po delam
stroitel'stva.
(Concrete)

CHERKASOV, P.K., otvetstvennyy za vypusk; PEVZNER, A.S., redaktor izdatel'stva;
TOKER, A.M., tekhnicheskiiy redaktor

[Uniform norms and estimates for construction and repair work for buildings of the second group] Edinye normy i rasssenki na stroitel'nye i montazhnye raboty dlia stroek vtoroi gruppy. Kiev, Gos. izd-vo lit-ry po stroit. i arkhitekture USSR. Sec. 38 [Preparation of steel structures and elements] Izgotovlenie stal'nykh konstruksii i detalei. Pt.1 [Preparation of structural steel elements] Izgotovlenie stroitel'nykh i stal'nykh konstruksii. Izd. 2-os. 1956. 38 p. (MLRA 10:2)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam stroitel'stva;
(Building, Iron and steel)

CHERKASOV, P.K., otvetstvennyy za vypusk; PEVZNER, A.P., redaktor
izdatel'stva

[Uniform norms and estimates for construction and repair work for buildings of the second group] Edinye normy i rastsenki na stroitel'nye i montazhnye raboty dlia stroek vtoroi gruppy. Kiev, Gos. izd-vo lit-ry po stroit. i arkhitekture USSR. Sec. 38 [Preparation of steel structures and elements] Izgotovlenie stal'nykh konstruktii i detalei. Pt.2 [Forging and fitting work; preparation and repair of tools and apparatus] Kuznechno-slesarnye raboty, izgotovlenie i remont instrumentov i prispособlenii. 1956. 75 p. (MLRA 10:2)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam
stroitel'stva.
(Building, Iron and steel)

SHERKASOV, P.K., otvetstvennyy za vypusk; PEVZNEE, A.S., redaktor
izdatel'stva

[Uniform norms and estimates for construction and repair work for
building of the second group] Edinye normy i rastsenki na stroitel'-
nye i montazhnye raboty dlia stroek vtoroi gruppy. Kiev, Gos. izd-vo
lit-ry po stroit. i arkhitekture USSR. Sec.40 [Preparation and
installation of molded parts] Izgotovlenie i ustanovka lepnykh
izdelii. 1956. 72 p. (MLRA 10:2)

1. Russia (1923- U.S.S.R) Gosudarstvennyy komitet po delam
stroitel'stva.

(Decoration and ornament, Architectural)

CHERKASOV, R.A.

Landslide in the Malaya Almatinka Valley. Izv. AN Kazakh SSR, Ser.
geol. no. 16:118-120 '53. (MLRA 9:5)
(Malaya Almatinka Valley--Landslides)

15.8110

39586
S/020/62/145/002/011/018
B106/B101

AUTHORS: Pudovik, A. N., Yevstaf'yev, G. I., and Cherkasov, R. A.
TITLE: Addition of incomplete phosphorus acid esters to unsaturated polyesters
PERIODICAL: Akademiya nauk SSSR. Doklady, v. 145, no. 2, 1962, 344-346

TEXT: This is a continuation of previous papers on the addition of various phosphorus acid esters to unsaturated electrophilic reagents in the presence of basic catalysts. Polyesters with molecular weights between 700 and 4000 obtained by condensation of maleic anhydride with various glycols were made to react with various esters of phosphorous acid. The resulting phosphorus-containing polyesters may be of interest as plasticizers, and as a component for the production of refractory material. Excessive addition of diethyl phosphite to polyethylene glycol maleinate (molecular weight: 750) in the presence of little sodium methylate as a catalyst, is a very vigorous and exothermic reaction yielding a solid, hygroscopic resin which does not continue burning when taken out of flame. Diethyl phosphite is added to all polyester double bonds. Experiments

Card 1/3

Addition of incomplete phosphorus ...

S/020/62/145/002/011/018
B106/B101

with mixtures of diethyl phosphite and polydiethylene glycol maleinate (molecular weight: 3600) of different molar ratios showed that the diethyl phosphite is added practically quantitatively to the polyester double bonds. Adequate choice of molar ratios allows the production of polyesters containing any desired amount of phosphonic groups and double bonds. Polydiethylene glycol maleinate was also made to react with diethyl thiophosphite and two cyclic alkyl phosphites (phosphorous ester with diethylene glycol, or 1,3-butylene glycol). Phosphite was always used in excess to guarantee the addition to all polyester double bonds. Furthermore, the reaction of diethyl dithiophosphate with the condensation products of maleic anhydride and ethylene glycol, β -thiodiglycol, 1,4-butylene glycol, and diethylene glycol (molecular weights of the polyesters: 1053-3183) was studied at different molar ratios. The products of addition to all polyester double bonds were rubber-like or solid materials, e.g., of the structure $\text{HO} \left[\begin{array}{c} \text{-CO-CH-CH}_2\text{-COOCH}_2\text{CH}_2\text{O-} \\ \text{S} \\ \text{S-P(OC}_2\text{H}_5)_2 \end{array} \right]_n \text{H}$. The products

of incomplete addition were viscous resins. All these polyesters are

Card 2/3

Addition of incomplete phosphorus ...

S/020/62/145/002/011/018
B106/B101

insoluble in alcohol and dioxane, some dissolve in water and yield opalescing solutions. Polyesters continue burning when taken out of flame owing to their sulfur content. Successive addition of diethyl phosphite and diethyl dithiophosphate to some unsaturated polyesters was also conducted. The ratios were chosen in such a way that the two phosphorus compounds added to 50% of the polyester double bonds. The polyesters thus obtained are viscous, water-soluble resins or solids which continue burning when taken out of flame. There are 4 tables.

ASSOCIATION: Kazanskiy gosudarstvennyy universitet im. V. I. Ul'yanova-Lenina (Kazan' State University imeni V. I. Ul'yanov-Lenin)

PRESENTED: January 23, 1962, by B. A. Arbuzov, Academician

SUBMITTED: January 16, 1962

Card 3/3

ACCESSION NR: AT4033992

S/0000/63/000/000/0091/0095

AUTHOR: Pudovik, A. N.; Cherkasov, R. A.; Pudovik, M. A.

TITLE: Polyalkyleneglycol dithiophosphates and the reactions of their addition to unsaturated compounds

SOURCE: Geterotsepnnyye vyssokomolekulyarnyye soyedineniya (Heterochain macromolecular compounds); sbornik statey. Moscow, Izd-vo "Nauka," 1963, 91-95

TOPIC TAGS: dithiophosphate, polyalkyleneglycol dithiophosphate, polyester, phosphorus containing polyester, polyester synthesis, unsaturated compound, electrophilic unsaturated compound, nucleophilic unsaturated compound, polyester addition reaction

ABSTRACT: Several polyalkyleneglycol dithiophosphates were synthesized by re-esterification of dithiophosphoric acid ethers with glycols (ethylene glycol, 1,2-propylene glycol, 1,4-butylene glycol, diethylene glycol, pyrocatechol and hydroquinone). Reactions lasted 1 to 6 hours at 50-130 mm pressure and 80-170C. The resultant polyesters (viscous or nearly solid transparent resins with 15.08 to 20.36% P) were used in additional reactions (30-60 min., 70-80C, 30% excess of the saturated compound, without a catalyst or with sodium ethylate, in dioxane solution for solid or highly viscous polyesters) to acrylonitrile, methacrylate, diethyl-

Card 1/2

ACCESSION NR: AT4033992

maleate, styrene, benzy'aniline and p-nitrobenzylaniline. Orig. art.has: 3
tables and 4 chemical equations.

ASSOCIATION: Kazanskiy gosudarstvennyy universitet Im. V. I. Ul'yanova-Lenina
(Kazan State University)

SUBMITTED: 09Jul62

DATE ACQ: 30Apr64

ENCL: 00

SUB CODE: OC

NO REF SOV: 004

OTHER: 002

Card - 2/2

PUDOVIK, A.N.; CHERKASOV, R.A.

Synthesis of polyalkylene glycol dithiophosphates and some
of their addition reactions. Vysokom. soed. 6 no.4:741-
744 Ap '64. (MIRA 17:6)

1. Kazanskiy gosudarstvennyy universitet imeni V.I. Ul'yanova-
Lenina.

CHERKASOV, R. I.

1. SOKOL(SKIY, D. V.; BOLKHOVITINA, Ye. G.; CHERKASOV, R. I.
2. USSR (600)
4. Cottonseed Oil
7. Hydrogenation of cottonseed oil with a copper-chrome oxide catalyst and with a copper-nickel oxide catalyst on a chrome oxide carrier, Masl. zhir. prom., 17, No. 6, 1952.
9. Monthly List of Russian Accessions, Library of Congress, February 1953, Unclassified.

CHERKASOV, R.S.; SIDOROVA, L.A., redaktor; MIRONTSEVA, M.I., tekhnicheskii redaktor.

[Collection of problems in stereometry; manual for teachers in secondary schools] Sbornik zadach po stereometrii; posobie dlia uchitelei srednei shkoly. Izd.2-e. Moskva, Gos.uchebno-pedagog. izd-vo Ministerstva prosveshchenia RSFSR, 1956. 84 p. (MLRA 9:5)
(Mensuration--Problems, exercises, etc.)

BEREZANSKAYA, Yelizaveta Savil'yevna; KOLMOGOROV, Nikolay Andreyevich;
NAGIBIN, Fedor Fedorovich; CHERKASOV, Rostislav Semenovitch;
LEPESHKINA, N.I., red.; GOLOVKO, B.N., tekhn.red.; KORNEYEVA,
V.I., tekhn.red.

[Collection of problems and exercises on geometry; textbook for
secondary school teachers] Sbornik zadach i voprosov po geo-
metrii; posobie dlia uchitelei srednei shkoly. Moskva, Gos.
uchebno-pedagog.izd-vo M-va prosv.RSFSR, 1959. 207 p.

(MIRA 13:10)

(Geometry--Problems, exercises, etc.)

CHERKASOV, R.S. (Moskva)

Fourteenth International ~~Conferences~~ of Teachers of Mathematics.
Mat. v shkole no.1:61-70 Jan-P '61. (MIRA 14:3)
(Mathematics--Congresses)

PROCHUKHAYEV, V.G.; CHERKASOV, R.S., eds., red.

[Raising the standards of teaching and the quality of student knowledge in mathematics] O povyshenii urovnia prepodavaniia i kachestva znanii uchashchikhsia po matematike; posobie dlia studentov pedagogicheskikh institutov i uchitelei matematiki. Moskva, Mosk. gos.ped.in-t im. V.I.Lenina, 1963. 190 p. (MIRA 16:12)
(Mathematics--Study and teaching)

CHERKASOV, R.S. (Moskva)

Results of the International Symposium on Mathematics held
in Budapest, Mat. v shkole no.3:74-80 My-Je '63.

(MIRA 16:7)

(Mathematics—Congresses)

(Mathematics—Study and teaching)

CHERKASOV, R.S.

Development of mathematical education in the schools of the
U.S.S.R. Mat i fiz Bulg 7 no.4:12-15 Jl-Ag '64.

1. Chief Editor, "Matematika v shkole", Moscow.

CHERNASOV, S.

CHERNASOV, S. (1955) 1955

Treatment by transfusion of a large number of leucocytes. Nauka
i zhizn' 22 no.4:64 Ap '55. (MLRA 8:6)
(Leucopenia)

CHERKASOV, S.

Iz praktiki vysotno-skorostnogo bombometaniia. (Vestnik vozdushnogo flota, 1937, v. 19, no. 7, p.26-27)

Title tr.: Bomb dropping from great heights and at high speeds.

TL504.V45 1937

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

CHEKASOV, S.

AUTHOR: Cherkasov, S.

25-1-47/48

TITLE: Acid-Resistant Clothes (Kislotozashchitnaya odezhda)

PERIODICAL: Nauka i Zhizn', 1958, # 1, p 79 (USSR)

ABSTRACT: This article describes new acid-resistant fabrics.
A new acid-resisting fabric - ~~III~~XB-30 - consists of a mixture of coarse wool and a synthetic chlorin-type fibre.
Another acid-repelling fabric made of a chlorin-type fibre and treated with a silico-organic preparation - TMC-9 - was developed recently. Clothes made of this fabric are hygienic, much lighter and have a longer period of wear than those made from ~~III~~XB-30.

AVAILABLE: Library of Congress

Card 1/1

MYAKOTA, K.K.; CHERKASOV, S.P.

Device for tying up pipe piles. Sbor.rats.predl.vnedr.v proizv.
no.l:26 '61. (MIRA 14:7)
1. Pervoural'skiy Novotrubnyy zavod.
(Pipe mills)

CHERKASOV V.

GOREV, Igor' Grigor'yevich; CHERKASOV, V., red.; GIL'DENRANT, Ye., tekhn.red.,

[Nazarovo State regional electric power plant] Nazarovskaya GRES.

[Krasnoyarsk] Krasnoyarskoe knizhnoe izd-vo, 1957. 27 p. (MIRA 11:5)
(Nazarovo Hydroelectric Power Station)

CHERKASOV, V.

[Production planning on collective farms; practices of the
Bulganin Collective Farm, Kotovo District, Moldavia] Proiz-
vodstvennoe planirovanie v kolkhoze; iz opyta kolkhoza im.
Bulganina, Kotovskogo raiona MSSR. Kishinev, Gos.izd-vo
Moldavii, 1957. 100 p. (MIRA 13:1)
(Kotovo District--Agriculture)

CHERKASOV, V.

Urgent task. Mest.prom. i khud.promys. 3 no.7:29-30 J1 '62.
(MIRA 15:8)

1. Nachal'nik Vladimirskogo oblastnogo upravleniya bytovogo
obslyzhivaniya naseleniya.
(Vladimir--Service industries)

CHERKASOV, V.

CHERKASOV, V. (Moscow)

Experience gained in teaching astronomy. Fiz. v shkole 15 no.4:

81-82 J1-Ag'55.

(MLRA 8:10)

(Astronomy--Study and teaching)

1. KUZ'MICHEV, N.: CHERKASOV, V.
2. USSR (600)
4. Meat Industry
7. Greater attention to processing livestock to which the raiser retains title,
N. Kuz'michev, V. Cherkasov, Mias.ind.SSSR. 24 no. 3, 1953.
9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncl.

CHERKASOV, V.

Simple and comprehensible standards are needed. Mas. ind. SSSR
30 no.3:33-34 '59. (MIRA 12:9)
(Meat industry--Standards)

CHERKASOV, V.

Sleep therapy. Nauka i zhizn' 20 no.8:35 Ag '53.

(MIRA 6:3)
(Sleep)

CHERKASOV, V.

Scientific-technical conference of institutions for higher
education on thermal conditions of radio and electronic devices, parts
and units. Izv.vys.ucheb.zav.; prib. 6 no.4:167-169 '63.

(MIRA 16:8)

(Electronic apparatus and appliances)

VOLKOV, D.P., prof. doktor tekhn.nauk; CHERKASOV, V.A., inzh.

Study of the dynamics of waste stackers. Gor.zhur. no.4:53-54
Ap '64. (MIRA 17:4)

1. Moskovskiy inzhenerno-stroitel'nyy institut imeni Kuybysheva.

CHERKASOV, V.A., dotsent.

Irrigating the rumen in atenia in cattle. Veterinariia 32
no.3:63-67 Mr '55. (MLRA 8:4)

1.Moskovskaya veterinarnaya akademiya.
(CATTLE--DISEASES)

CHERKASOV, V.A., kand.vet.nauk

Effect of drops in temperature and air moisture on the milk yield
of cows. Veterinariia 36 no.3:58-60 Mr '59. (MIRA 12:4)
(Dairy cattle)

DOMRACHEV, Georgiy Vladimirovich, prof., zasluzh.deystel' nauki RSFSR [deceased];
SHARABRIN, I.G., prof.; SMIRNOV, S.I., prof.; CHAGIN, V.G., prof.;
KLEYNBOK, Ya.I., prof.; LYAPUSTIN, A.K., prof.; SEMUSHKIN, N.R.,
prof. [deceased]; ONEGOV, A.P., prof.; KHRUSTALEV, S.A., prof.
[deceased]; CHERKASOV, V.A., dotsent; SOLOVEY, A.S., red.; PROKOF'YEV,
L.N., tekhn.red.

[Pathology and treatment of internal noninfectious diseases of farm
animals] Patologiya i terapiya vnutrennikh nezaraznykh boleznei
sel'skokhoziaistvennykh zivotnykh. Moskva, Gos.izd-vo sel'khoz.lit-ry,
1960. 503 p. (MIRA 13:11)

1. Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh
nauk im. V.I.Lenina (for Domrachev).
(Veterinary medicine)

CHERKASOV, V.A.

Training and employing agricultural specialists. Zemledelie 5
no.3:61-63 Mr '57. (MIRA 10:3)

1. Predsedatel' kolchoza imeni Bulganina, Kotovskogo rayona,
Moldavskoy SSR. (Agricultural education)

CHERKASOV, V.A., dotsent

Device for the hydrotherapy of the rumen in cattle. Veterinariia
40 no.7:56-57 J1 '63. (MIRA 16:8)

1. Moskovskaya veterinarnaya akademiya.
(Veterinary instruments and apparatus) (Rumen--Diseases)

SHARABRIN, I.G., prof.; CHERKASOV, V.A., dotsent; SHAYKHAMANOV, M.Kh.,
assistant; KOKOVIN, A.I., ordinator

Treatment of dyspepsia in calves by the method of the intraperitoneal
injections of medicinal mixtures. Veterinariia 41 no.2:64-66 F '64.
(MIRA 17:12)

1. Moskovskaya veterinarnaya akademiya.

CHERKASOV - V. F.

CHERKASOV, V. F.

T-13

USSR/Human and Animal Physiology (Normal and Pathological).
Effect of Physical Factors. Ionizing Radiation.

Abs Jour : Ref Zhur - Biol., No 16, 1958, 75289

Author : Cherkasov, V.F.

* Inst : -
Title : On Several Pressor Reflexes During Radiation Sickness.

Orig Pub : Med. radiologiya, 1957, 2, No 1, 41-47.

Abstract : In cats in acute tests under urethane narcosis, pressor reaction were investigated in 1-15 days after general roentgen exposure to 400 r, which caused an expressed form of radiation sickness. The size of the pressor reaction in a ligated carotid artery, starting from the 5th day after exposure dropped steadily (on the average 42% against the control size), and the pressor reflex from sciatic nerve (stimulated by electric current of 100 hz, 1-4 v) changed undulatingly (in 1-5th day - increase, in 10 days - small decrease, and in 15 days - increase anew).

Card 1/2

* Из ЦЕНТРАЛЬНОГО НАУЧНО-ИССЛЕДОВАТЕЛЬСКОГО РАДИОЛОГИЧЕСКОГО
ИНСТИТУТА АКАДЕМИИ НАУК СССР.

USSR/Human and Animal Physiology (Normal and Pathological).
Effect of Physical Factors. Ionizing Radiation.

T-13

Abs Jour : Ref Zhur - Biol., No 16, 1958, 75289

These differences the author concludes with the influence of exposure on the receptors of the sino-carotid reflexogenic zone, as well as with the possible different degree of radiation infection at various levels of closure of the reflexes investigated. -- E.D. Glikson.

Card 2/2

- 114 -

CHERKASOV, V.F.

Depressor reflex from the vagus nerve in radiation sickness
complicated by hemorrhage. Vop.radiobiol. 2:61-79 '57.

(MIRA 12:6)

1. Sotrudnik Tsentral'nogo nauchno-issledovatel'skogo rentgeno-
radiologicheskogo instituta Ministerstva zdravookhraneniya SSSR.
(RADIATION SICKNESS) (HEMORRHAGE) (CARDIOVASCULAR SYSTEM)

CHEKASOV, V.F.

Some pressor reflexes in radiation sickness complicated by
hemorrhage. Vop.radiobiol. 2:80-92 '57. (MIRA 12:6)

1. Sotrudnik Tsentral'nogo nauchno-issledovatel'skogo rentgeno-
radiologicheskogo instituta Ministerstva zdravookhraneniya SSSR.
(RADIATION SICKNESS) (HEMORRHAGE) (BLOOD PRESSURE)
(RESPIRATION)

CHEERKASOV, V. V.

Changes in arterial blood pressure and frequency of heart contractions during bloodletting in animals as a result of the combined effect of ionizing radiation and blood loss. Vop. radiobiol. 2:226-233 '57. (MIRA 12:6)

1. Sotrudnik Tsentral'nogo nauchno-issledovatel'skogo rentgeno-radiologicheskogo instituta Ministerstva zdavookhraneniya SSSR.
(RADIATION SICKNESS) (HEMORRHAGE) (CARDIOVASCULAR SYSTEM)

CHERKASOV, V.F.

Some specific features of the course of radiation sickness
complicated by hemorrhage. Vop.radiobiol. 2:248-253 '57.
(MIRA 12:6)

1. Sotrudnik Tsentral'nogo nauchno-issledovatel'skogo rentgeno-
radiologicheskogo instituta Ministerstva zdavookhraneniya SSSR.
(RADIATION SICKNESS) (HEMORRHAGE)

CHEKULAS, V.F., Doc Med Sci--(diss) "on the combined effect of ionizing radiation and loss of blood ^{up} on certain functions of the animal organism. (an Experimental study)." Leningrad, 1958. 39 pp (Min of Health USSR. Central Sci Res Roentgen-Radiol Inst). List of author's works, p 30 (10 titles) (ML, 44-52, 124)

- 64 -

CHERKASOV, Vladimir Fedorovich, kand.med.nauk; VASILEVSKIY, N.N., red.;
~~GULYAYEVA, T.S., tekhn.red.~~

[Tagged atoms in physiology and medicine] Mechenyeatomy v
fiziologii i meditsine. Leningrad, Gos.izd-vo med.lit-ry. Le-
ningr.otd-nie, 1959. 60 p. (MIRA 13:5)
(TRACKERS (BIOLOGY))

CHERKASOV, V F.

69

PHASE I BOOK EXPLOITATION

SOV/5435

Kiselev, P. N., Professor, G. A. Gusterin, and A. I. Strashinin, Eds.

Voprosy radiobiologii. t. III: Sbornik trudov, posvyashchenny 60-letiyu so dnya rozhdeniya Professora M. N. Pobedinskogo (Problems in Radiation Biology. v. 3: A Collection of Works Dedicated to the Sixtieth Birthday of Professor M[ikhail] N[ikolayevich] Pobedinskiy [Doctor of Medicine]) Leningrad. Tsentr. n-issl. in-t med. radiologii M-va zdravookhrananiya SSSR, 1960. 422 p. 1,500 copies printed.

Tech. Ed.: P. S. Peleshuk.

PURPOSE: This collection of articles is intended for radiobiologists.

COVERAGE: The book contains 49 articles dealing with pathogenesis, prophylaxis, and therapy of radiation diseases. Individual articles describe investigations of the biological effects of radiation carried out by workers of the Central Scientific Research Institute for Medical Radiology of the Ministry of Public Health, USSR. [Tsentral'nyy nauchno-issledovatel'skiy institut meditsinskoy radiologii Ministerstva zdravookhraneniya SSSR] during 1958-59. The following

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SOV/5435

Problems in Radiation Biology (Cont.)

topics are covered: various aspects of primary effects of radiation; the course of some metabolic processes in animals subjected to ionizing radiation; reactions in irradiated organisms; morphologic changes in radiation disease; and reparation and regeneration of tissues injured by irradiation. Some articles give attention to the effectiveness of experimental medical treatments. No personalities are mentioned. References accompany almost all of the articles.

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Card 2/10

Problems in Radiation Biology (Cont.)

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L 17555-63

EWI(1)/EWI(m)/EOS/ES(j) AMD/AFFTC/ASD AR/K

ACCESSION NR: AT3002370

S/2930/62/000/000/0115/0123

AUTHOR: Cherkasov, V. F. (Leningrad)

TITLE: Effect of loss of blood on peripheral blood changes in radiation sickness ¹⁹

SOURCE: K voprosam nanney diagnostiki ostroy luchevoy bolezni; sbornik nauchnykh rabot. Kiev, Medgiz USSR, 1962, 115-123

TOPIC TAGS: radiation sickness, loss of blood, peripheral blood, erythrocyte sedimentation rate, hemoglobin

ABSTRACT: Two groups of cats were exposed to single total X-irradiation doses of 400 r (RUM-3 unit, 18-21 r/min). 1-1.5 hrs after irradiation venesections were performed on the hip artery in the first group reducing the total blood by 1/7. In the second group only an incision was made at the hip with no venesection. In both groups blood was taken from the ear on the 1, 3, 5, 10 and 15th days, to determine the number of leucocytes and erythrocytes, hemoglobin content, erythrocyte sedimentation rate, and color index. It was found that on the first day after irradiation the mean number of

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ACCESSION NR: AT3002370

leucocytes for the first and second groups decreases. On the fifth day the number of leucocytes continues to decrease for both groups, but the mean number of leucocytes for the first group is considerably higher (33% of initial value) than for the second group (21% of initial value). By the 10th and 15th days, the number of leucocytes for both groups continues to decrease with the difference not as great, but the leucocyte count for the first group is somewhat higher than for the second. The first day after irradiation the number of erythrocytes decreases in the first and second groups. By the third day the number of erythrocytes in the second group increases almost to initial value and remains at this level through the fifth day. By the tenth day there is a significant decrease in erythrocytes which continues through the 15th day. But in the first group, on the 3d day after irradiation the number of erythrocytes does not increase at all but instead decreases and continues to do so through the 15th day. On the 15th day the number of erythrocytes in the first group comprises 70% of the initial value, and in the second group 75% of the initial value. Hemoglobin in the first group decreases on the first day and by the 10th day reaches 43% (with initial value 63%) and changes little by the 15th day. In the second group on the 1st day

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ACCESSION NR: AT3002370

hemoglobin tends to decrease, but by the 3d day in almost all cases hemoglobin increases to a mean of 64% (with 61% the initial value). After the 5th day and through the 15th day the hemoglobin decreases to 46%. The color index for both groups changes little. Erythrocyte sedimentation rate changes sharply for both groups. For the first group the erythrocyte sedimentation rate increases by 42 mm/hr (from initial value of 34 mm/hr to 76 mm/hr) by the 15th day and for the second group it increases by 34 mm/hr (from initial value of 22 mm/hr to 56 mm/hr) by the 15th day. The results indicate that changes in the peripheral blood caused by the combined effect of ionizing radiation and loss of blood differ from those caused only by ionizing radiation. On the fifth day, it should be noted, the leucocyte count in the peripheral blood is somewhat higher for the group exposed to the combined effect, which may be the result of the leucopoietic function of the hemopoietic system remaining intact longer. Hemoglobin changes correspond almost entirely to erythrocyte changes in both groups. Erythrocyte sedimentation rate increase appears to be caused by infection developing in radiation sickness and confirms the observations of other specialists who recommend using antibiotics in the first days of radiation sickness, especially if complicated by loss of

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ACCESSION NR: AT3002370

blood. But it remains unexplained why the combined effect of radiation and blood loss affects the erythrocyte sedimentation rate more. The author concludes that the difference in peripheral blood changes for both groups is not great and the slightly higher survivability rate for the group exposed to the combined effect cannot be explained by blood changes (especially with negative effects of blood loss on erythrocytes and hemoglobin) and that other factors should be studied. Orig. art. has: 3 figures, 2 tables.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 28May63

ENCL: 00

SUB CODE: AM

NO REF SOV: 004

OTHER: 001

Card 1/4

KALININA, Nonna Antonovna; CHERKASOV, V.F., red.; BUGROVA, T.I.,
tekhn. red.

[Sequelae of the action of ionizing radiation during
pregnancy] Posledstviia vozdeistviia ioniziruiushchei ra-
diatsii vo vremia beremennosti. Leningrad, Medgiz, 1963.
94 p. (MIRA 16:6)

(RADIATION--PHYSIOLOGICAL EFFECT)
(PREGNANCY, COMPLICATIONS OF)

ZEDGENIDZE, G.A.; CHERKASOV, V.F.; FELATOV, P.P.; YELASHOV, Yu.G.;
CHERNYACHOVSKAYA, A.K.; SAYENKO, S.F.

Scientific research on radiobiology, clinical radiology and
roentgenology conducted in the institutes of the Academy of
Medical Sciences of the U.S.S.R. in 1964. Vest. AMN SSSR
20 no.9:3-10 '65. (MIRA 18:11)

1. Institut meditsinskoy radiologii AMN SSSR, Obninsk.

BOL'SHINSKIY, M.I., inzh.; KHOZIN, A.V., inzh.; CHERKASOV, V.F., inzh.

Using PML-5 rock loaders during the mining of inclined workings.
Shakht. stroi. 7 no.12:25 D'63. (MIRA 17:5)

1. Stroitel'noye upravleniye No.6 tresta Donetskshakhtostroy.

POLOVINSKIY, M.I., inzh.; CHELIKANOV, V.F., inzh.

Opening a seam presenting a danger of sudden outbursts of coal
and gas at the "Ignat'evskaya" Mine. Shakhtostroi. 7 no.5:
24-25 May '63. (MIRA 17:4)

1. SU No.6 treats Ponatskiy-shakhtostroy.

CHUCHINA, M.K., inzh.; SULIMA, N.T., inzh.; LOPATIN, V.F., inzh.; CHERKASOV,
V.G., inzh.

Commentary on the article by Engineer E.V.Liul'ko "Regulating the
computation and payment of general mine expenses in mining."
Shakht.stroi. 5 no.4:28-30 Ap '61. (MIRA 14:5)

1. Trest Makeyevshakhtostroy (for Sulima). 2. Institut Kuzbassgipro-
shakht (for Lopatin). 3. Ukrainskiy nauchno-issledovatel'skiy institut
organizatsii i mekhanizatsii shakhtnogo stroitel'stva (for Cherkasov).
(Mining industry and finance)
(Liul'ko, E.V.)

CHERKASOV, V. I.

"Device for Heating Spokes Electrically," Sel'khoz mashina, No.4, 1952

NEMCHENKO, V.S.; BOCHAROV, M.D.; KRISTOSTUR'YAN, N.G.; CHERKASOV, V.I.;
ANDREYANOV, V.V.; KAUFMAN, V.M.; PAKHMANOV, V.F.; ZVORYKIN, A.A.,
otv.red.; ANICHKOV, N.N., red.; BARDIN, I.P., red.; BLAGONRAVOV,
A.A., red.; VVEDENSKIY, B.A., red.; GRIGOR'YEV, A.A., red.;
KAPUSTINSKIY, A.F., red.; KOLMOGOROV, A.N., red.; MIKHAYLOV, A.A.,
red.; OPARIN, A.I., red.; PETROV, F.M., red.; SPOLETOV, V.N., red.;
STRAKHOV, N.M., red.; FIGUROVSKIY, N.A., red.; KOSTI, S.D., tekhn.red.

[Biographical dictionary of leaders in the natural sciences and
technology] Biograficheskiy slovar' deiatelei estestvoznaniia
i tekhniki. Vol.1. A - L. Otvetstvennyi red. A.A.Zvorykin. Red.
kollegiia: N.N.Anichkov i dr. Moskva, Gos.nauchn.izd-vo "Bol'shaia
Sovetskaia Entsiklopediia." 1958. 548 p. (MIRA 12:4)

1. Redaktsiya istorii estestvoznaniya i tekhniki Bol'shoy Sovetskoy
Entsiklopedii (for Nemchenko, Bocharov, Kristostur'yan, Cherkasov;
Andreyanov, Kaufman, Pakhmanov).
(Scientists)

ZVORYKIN, A.A., otv.red.; NEMCHENKO, V.S., zaveduyushchiy red.;
BOCHAROV, M.D., starshiy nauchnyy red.; KRISTOSTUR'YAN,
N.G., starshiy nauchnyy red.; CHERKASOV, V.I., starshiy
nauchnyy red.; ANDREYANOV, V.V., red.; GARKOVENKO, R.V.,
nauchnyy red.; KAUFMAN, V.M., mladshiy red.; PAKHMANOV,
V.F., mladshiy red.; KOSTI, S.D., tekhn.red.

[Biographical dictionary of figures in the natural sciences
and technology] Biograficheski slovar' deiatelei estestvo-
znaniya i tekhniki. Otvetstvennyi red. A.A.Zvorykin. Red.
kollegiya: N.N.Anichkov i dr. Moskva, Gos.nauchn.isd-vo
"Bol'shaia sovetskaya entsiklopediya." Vol.2. M - IA.
1959. 467 p.
(MIRA 12:7)

1. Redaktsiya istorii estestvoznaniya i tekhniki Bol'shoy
Sovetskoy Entsiklopedii (for all except Zvorykin, Kosti).
(Scientists) (Technology--Biography)

CHERKASOV, V.I., inzh.

Metal detectors. Put'i put.khoz. 4 no.7:37 J1 '60. (MIRA 13:7)
(Stone and ore breakers) (Magnetic instruments)

CHERKASOV, V.I., starshiy inzh.

Dumper stop for dump truck. Put' i put.khoz. 5 no.7:27 J1
'61. (MIRA 14:8)

(Dum trucks)

CHERKASOV, V.I.

Clamping device. Put' i put.khoz. 8 no.6:31 '64. (MIRA 17:9)

L 45966-66 EWT(1)/EWT(m) SCTB JKT/DD/RD/JT/GD/JXT(CZ)
ACC NR: AT6030697

SOURCE CODE: UR/0000/66/000/000/0081/0084

AUTHOR: Cherkasov, V. K.; Ushakova, G. S.; Piguzova, L. I.; Devyatko, A. V.;
Mokhov, V. G.; Solov'yev, V. I.; Portnova, K. M.; D'yakonov, R. V.; Martynova, R. A.;
Ratts, L. B.

ORG: none

TITLE: The possibility of using the multifunctional properties of zeolites in a
physical and chemical air-regeneration system

SOURCE: Konferentsiya po kosmicheskoy biologii i meditsine, 1964. Materialy. Moscow,
Inst. mediko-biol. problem, 1966, 81-84

TOPIC TAGS: life support system, closed ecological system, space biology

ABSTRACT: A physical-chemical air "regeneration" system which has been proposed for
manned spaceflight is shown in Fig. 1. In this system CO₂ is removed from cabin air
by adsorption on zeolite. The carbon dioxide then undergoes vacuum desorption from
the zeolite and passes through a CO₂ collector to the catalytic reactor, where it
is reduced with hydrogen from the electrolyzer to water and methane. The water returns
to the electrolyzer and is broken down into oxygen (used for human
respiration) and hydrogen. The disadvantages of this method are the difficulties of
creating a vacuum on board a spacecraft and the additional electrical energy required
to operate the CO₂ collector. Studies have shown that specially treated B-zeolite

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ACC NR: AT6030697

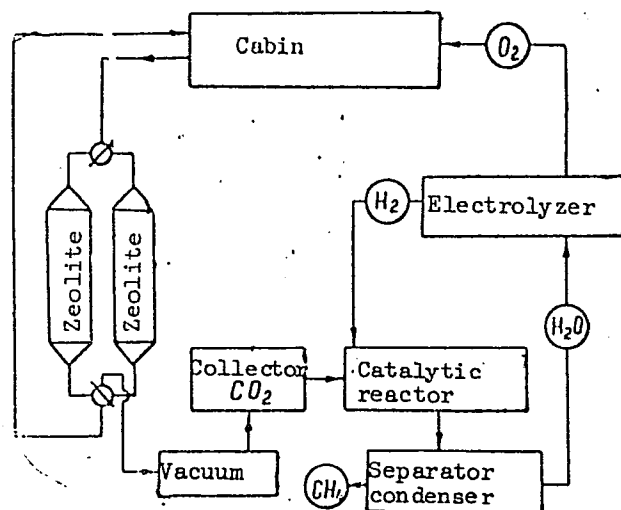


Fig. 1. Schematic diagram of a physical and chemical air "regeneration" system

can be used in such a system for both sorption and catalysis, retaining its properties through a number of cycles. An improved air "regeneration" scheme using B-zeolite is shown in Fig. 2. Cabin air is purified by passing through a B-zeolite

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ACC NR: AT6030697

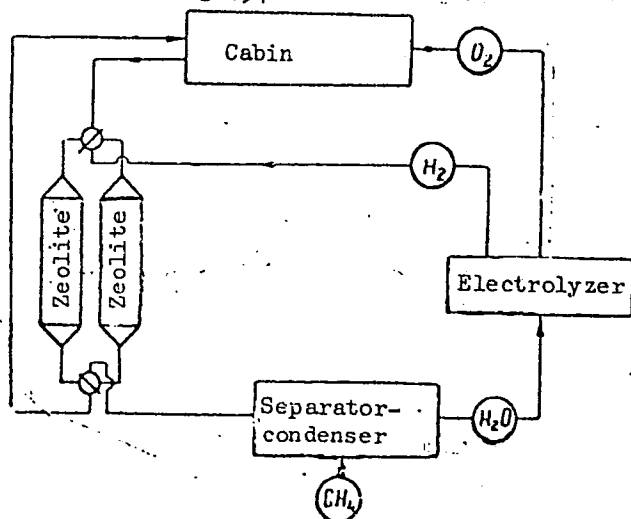


Fig. 2. Schematic diagram of a physical-chemical air "regeneration" system using B-zeolite

adsorber. Hydrogen derived from electrolysis is then passed through zeolite in a second adsorber, simultaneously desorbing CO_2 and reducing it to water and methane. The water is electrolyzed as in the first system. Temperature regulation is very important for the successful operation of this system, since a $7-12^\circ\text{C}$ temperature variation alters the gas conversion level by 10-15%. Orig. art. has: 3 figures. [JS]

SUB CODE: 06/ SUBM DATE: 14Apr66/ ATD PRESS: 5086
Card 3/3

CHERKASOV, V.L.; CHERNOKHVESTOVA, Ye.V.; NIKITINA, V.D.

Properdin system and its role in infection and immunity.
Report No.6: Properdin in erysipeloid. Zhur. mikrobiol.,
epid. i immun. 40 no.3:121-122 Mr '63. (MIRA 17:2)

1. Iz Moskovskogo instituta epidemiologii i mikrobiologii
i kafedry infektsionnykh bolezney I Moskovskogo ordena
Lenina meditsinskogo instituta.

CHERKASOV, V.L.

Vitamin B₁₂ in the over-all treatment of Botkin's disease. Vrach.delo
no.9:979 S '59. (MIRA 13:2)

1. Sinel'nikovskaya rayonnaya bol'nitsa Dnepropetrovskoy oblasti.
(CYANOCOBALAMINE) (HEPATITIS, INFECTIOUS)

CHEKASOV, V.L. (Sinel'nikovo)

Concerning the term "virus influenza." Vrach.delo no.2:201
F '60. (MIRA 13:6)
(INFLUENZA)

CHERKASOV, V.I.

Comparative evaluation of the effectiveness of various methods
of treating Botkin's diseases in children. *Pediatrics* 38 no.1:
47-49 '60. (MIRA 13:10)
(HEPATITIS, INFECTIOUS)

CHERKASOV.V.L.

Comparative effectiveness of certain methods of treating
Botkin's disease in children. *Pediatrics* 38 no.4:47-49 Apr'60.
(MIRA 16:7)

1. Iz Sinel'nikovskoy rayonnoy bol'nitsy (glavnyy vrach A.R.
Bychok) Dnepropetrovskoy oblasti.
(HEPATITIS, INFECTIOUS)

CHERKASOV, V.L.; CHERNOKHVOSTOVA, Ye.V., kand.med.nauk; NIKITINA, V.D.

Content of blood properdin in erysipelas patients. Vrach.delo
no.11:99-101 N 62. (MIRA 16:2)

1. Moskovskiy institut epidemiologii i mikrobiologii i kafedra
infektsionnykh bolezney (zav. -- prof. K.V. Bunin) I-go Moskovskogo
meditsinskogo instituta.
(ERYSIPELAS) (PROPERDIN)

SOBOLEV, V.R.; CHERKASOV, V.I.

Principles for therapeutic schemes in the treatment of erysipelas with the peroral and intramuscular administration of tetracycline. Antibiotiki 7 no.9:836-839 S '62. (MIRA 15:12)

1. Kafedra mikrobiologii (zav. - chlen-korrespondent AMN SSSR prof. Z.V.Yermol'yeva) ISentral'nogo instituta usovershenstvovaniya vrachey i kafedra infektsionnykh bolezney (zav. - prof. K.V.Bunin) I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.

(TETRACYCLINE)(ERYSIPELAS)

CHERKASOV, V.L.

Use of tetracycline in treating erysipelas. Sov.med. 25 no.1:58-62
Ja '62. (MIRA 15:4)

1. Iz kafedry infektsionnykh bolezney (zav. - prof. K.V.Bunin) i
Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova
i Moskovskoy klinicheskoy infektsionnoy bol'nitsy (glavnyy vrach
N.G.Zaleskver, nauchnyy rukovoditel' - prof. K.V.Bunin).
(TETRACYCLINE) (ERYSIPELAS)

LOBOV, V.P.; STOKHAN', V.V.; CHEREPENKO, T.I.; CHEREKASOV, V.M.

Fungicidal properties of some pyrimidine substituents. *Dokl. Akad. Nauk SSSR*. 1981. 254:2248-2249. No. 10. 1p. (MIRA 18:11)

I. Institut organicheskoy khimii AN UkrSSR, Kiev.

COMMON ILLUMINANTS OPEN MATERIALS INDEX										1ST AND 2ND ORDERS PROCESSES AND PROPERTIES INDEX									
CHERKASOV, V. M. CR New oxidation-reduction indicators. <i>N</i>-Phenylanthranilic acid. A. V. Kirsanov and V. M. Cherkasov. <i>Zavodskaya Lab.</i> 3, 143 4; <i>Bull. soc. chim.</i> [5], 3, 817 21 (1936).--Preliminary expts. with the substitution of <i>o</i>-PhNHCH₂CO₂H (I) for phenanthroline (II) indicator and the prepn. of the new <i>m</i>- and <i>p</i>-PhNHCH₂CO₂H are discussed. On the addn. of 1 drop of 0.1 <i>N</i> K₂Cr₂O₇ to 300 cc. of 2 <i>N</i> H₂SO₄ contg. 0.5 cc. of the indicator (0.60 g. I in 20 cc. of 5% Na₂CO₃ dild. to 1 l.), the soln. is instantly changed from colorless to a rose-violet. Similar color reaction takes place in titration of Fe⁺⁺ in 2 <i>N</i> H₂SO₄ on addn. of 1 drop excess of K₂Cr₂O₇. With higher and lower concns. of H₂SO₄ (or equiv. concns. of HCl) the color change is less sharp in the intensity and time. Use of 7 <i>N</i>-phenylanthranilic acid as indicator in oxidation-reduction volumetric analysis. V. S. Surokovskii and V. V. Stepin. <i>Ibid.</i> 144 7.--I was used as indicator in the titration of FeSO₄ with K₂Cr₂O₇, KMnO₄, Ce(SO₄)₃ and (NH₄)VO₃ with excellent results, the color change varying from crimson to violet. Potentiometric titrations gave identical results. The indicator has the oxidation potential of 1.08 in relation to the H electrode, and is particularly suitable for the detn. of Fe in ores without the use of H₂PO₄ and fluoboric. It is suitable for back titration and is superior to II, because it gives sharp color reaction with an excess of oxidizing agent and not a reducing agent as in the case of II. Use of <i>N</i>-phenylanthranilic acid in the determinations of vanadium and chromium in the presence of one another and of iron in ores. <i>Ibid.</i> 263 7. Procedures for the method of Lang and Kurtz (C. A. 26, 384) with substitution of I for diphenylamine as indicators are described. In the detn. of Fe in an ore contg. 51.6% Fe by titration with K₂Cr₂O₇ by the method of Knopf 50% H₂SO₄ was substituted for the Knopf mixt. contg. H₂PO₄ and I or diphenylaminosulfonic acid as indicator, giving results accurate to 0.1%. Fe Chas. Blane																			
ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION 827																			
SEARCH SYMBOL 827										827 827									

CA

17

New volumetric semimicro determination of pyram-
done. V. M. Cherkasov and V. A. Petrova (Sverdlovsk
Control-Anal. and Sci.-Research Lab. of the Sverdlovsk
Regional Drug Admin.). *Zhur. Anal. Khim.* 5, 305-7
(1980).—Pyramdone was detd. by oxidizing it with pen-
ta-valent V and titrating back with $(\text{NH}_4)_2\text{Fe}(\text{SO}_4)_2$. The
reaction should be carried out in 8-10 N H_2SO_4 . In detg.
0.0080-0.0176 g. the abs. error was 0-0.0002%.

M. Hosh

CHERKASOV, V. M.

Chem Abs

V. 49 25 Jan 54

Organic Chem

~~New oxidation-reduction indicators. m-, p- and m-anilino benzoic acids. V. M. Cherkasov (N. P. Gamalei Inst. Epidemiol. and Microbiol., Dpt. Microbiol., Zhur. Obsachei Khim. 23, 121-4 (1953); cf. C.A. 36, 4770^a.—Introduction of CO₂H into Ph₂NH raises the oxidation-reduction potential of the indicator but position of CO₂H has almost no effect on the value of the potential. m- and p-anilino benzoic acids can be used in titrations with strong oxidizing agents: Na₂Cr₂O₇ or Ce⁴⁺. Heating 0 g. p-IC₆H₄-CO₂H with 0 g. dry K₂CO₃ and 40 ml. PhNH₂ with 0.2 g. Cu powder 15 hrs. under air condenser at reflux, with removal of PhNH₂ by steam distn. and acidification of the filtered residue gave 15% pure p-PhNHCH₂CH₂CO₂H, m. 153-9° (from dil. EtOH); shaken with Me₂SO₄ and 2N NaOH it gave the Me ester, m. 115-16°; the same is obtained on treatment with CH₃N₃. The Me ester heated with excess N₂H₄·H₂O 5 hrs. on steam bath gave the hydrazide, m. 193-4° (from EtOH). Similar reaction sequence with m-IC₆H₄-CO₂H gave 7% m-PhNHCH₂CH₂CO₂H, m. 140-1° (from Me₂CO). On oxidation of the p-isomer the compds. develop a blue-violet color after going through green; the m-isomer goes to blue-violet after being initially green, with a pink intermediate color. With Ce⁴⁺ salts oxidation is achieved even in 2N H₂SO₄. For titration of Mohr's salt 5-6N H₂SO₄ is suitable. The oxidation reduction potential of the p-isomer is 1.12 v., that of m-isomer about 1.12 v. The color of the p-isomer is stable for 12 hrs., that of m-isomer about 1 hr. Typical titrations with these acids as indicators gave perfect checks when compared with those run using p-PhNHCH₂CH₂SO₃H or o-PhNHCH₂CH₂CO₂H indicators.~~

②

chem

MF 4-27-54

CHERKASOV, V.M.

Chemical Abst.
Vol. 48 No. 5
Mar. 10, 1954
Organic Chemistry

New oxidation-reduction indicators. IV. Diphenyl-
amine-4-sulfo-2'-carboxylic acid. V.M. Cherkasov (N. F.
Gamalei Epidemiol. and Microbiol. Inst., Dnepropetrovsk).
Zhur. Obshchei Khim. 23, 187-8 (1953); cf. *C.A.* 48, 6452.
Heating 11.5 g. Na sulfanilate, 9.5 g. o -ClC₆H₄CO₂Na, 0.1 g.
powd. Cu, and 0.8 g. CuSO₄ in sealed tubes with 20 ml. H₂O
15 hrs. at 112-20° gave, after filtration, acidification with
HCl to Congo red, and extn. of the ppt. with Et₂O to re-
move o -ClC₆H₄CO₂H, 28.8% diphenylamine-4-sulfo-2'-car-
boxylic acid in the form of the Ba salt, by pptn. of the filtrate
with satd. BaCl₂. The salt, (C₁₅H₁₀O₄NS)₂Ba, (5.3 g.) was
heated on steam bath with 10 ml. H₂O and 0.5 ml. concd.
H₂SO₄, filtered hot, adjusted to 20 ml., and treated with 7
ml. HCl (d. 1.19); the product is least sol. in 20% HCl, and
reprecip. as above gave the pure acid (I), greenish plates,
decomp. without melting. I with BaCO₃ yields a water-
sol. Ba salt, C₁₅H₁₀O₄NSBa. I (2.03 g.) in 5 ml. H₂O with
0.53 g. Na₂CO₃ gave C₁₅H₁₀O₄NSNa.H₂O, poorly sol. in
H₂O, insol. in EtOH. I (2.03 g.) treated in 10 ml. H₂O with
1.06 g. Na₂CO₃ and 5 ml. H₂O, then evapd., gave very sol.
C₁₅H₁₀O₄NSNa₂. I (1.40 g.) in 15 ml. 10% NaOH treated
with 5.04 g. Me₂SO, and acidified after 15 min. gave the
mono-Me ester, which ppts. on acidification; it is sol. in
EtOH. The Ba salt is sparingly sol. in H₂O. The ester
decomp. before melting. I (0.001 M soln.) used as an indica-
tor in titrations with K₂Cr₂O₇ and Ce sulfate showed a color
change from colorless to yellow-green, finally to pure blue-
violet. In 10N H₂SO₄ the least amt. of the oxidizing agent
(0.001N) is 2 ml.; the optimum amt. is 4 ml. At lower
acidity than 10N H₂SO₄ the color change is delayed. If
Fe⁺⁺ is present the color change occurs even in 7.5N H₂SO₄.
The mono-Me ester has similar indicator properties.

G. M. Kosolapoff

7-14-54

CHERKASOV, V.M.

U S S R :

New oxidation-reduction indicators. IV. Diphenylamine-
4-sulfo-2'-carboxylic acid. V. M. Cherkasov. *J. Gen. Chem.*
U.S.S.R. 23, 201-3(1953)(Engl. translation).—See C.1.
49, 2655d. H. L. H.

CHERKASOV, V.M.

Preparation of vanadium organic compounds. Zhur.ob.khim. 25 no.6:
1136-1139 Je '55. (MLRA 8:12)

1. Ural'skiy politekhnicheskiy institut
(Vanadium organic compounds)

CHERKASOV, V. M.

79-1-42/63

AUTHORS: Nirenburg, V. L. ; Postovskiy, I. Ya. ; Cherkasov, V. M.

TITLE: On Some Aryl Derivatives of Cyanogen Thiourea (O nekotorykh arilproizvodnykh tsiantionoshevinny)

PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol.28, Nr 1, pp.198-205 (USSR)

ABSTRACT: In publications a number of thiourea compounds were described which possess biological activity. A large number of these papers was recently devoted to the derivatives of aminothiourea (thiosemicarbazide), among whom compounds of an antituberculous activity were found. Other derivatives of thiourea could also be of interest, thus e.g. those with the physiologically active cyanogen group. Thus it was attempted to synthesize some N-aryl-N'-cyanogen-thioureas ($\text{Ar-NH-CS-NH-C}\equiv\text{N}$). The easily accessible 5-imino-3-thion-1,2,4-dithiazolidine (isopersulfocyanic acid, "hydroxanthane") formula (I) served as initial product. This product which had already been obtained by Wöhler 1821 (reference 3) forms from potassium thiocyanate and sulfuric acid in the cold. In the conversion of 5-imino-

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On Some Aryl Derivatives of Cyanogen Thiourea

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no-3-thion-1,2,4-dithiazolidine with aromatic amines the heterocycle splits with elimination of elementary sulfur and forms 1-aryldithiobiurates. Dithiobiurate easily oxidizes and is again converted to a cyclic dithiazolidine compound (III) "thiuret" which under the influence of a caustic potash solution is subject to splitting, where N-aryl-N'-cyanogen-thiourea manifests itself as a potassium salt of the isoform (IV). Thus the potassium salts and the methyl ethers of the isoform N-aryl-N'-cyanogen-thiourea were synthesized. It was found that, in contrast to aromatic formic acids, α -aminopyridine and α -aminopyrimidine split up "hydromanthane", under which conditions thiocyanogen-hydrogen-salts of heterocyclic amines (not of dithiobiurates) form. It was shown that the potassium salts of cyanamidodithiocarbonic acid and N-aryl-N'-cyanisothioureas with various metals yield precipitates insoluble in water. On examination in vitro the N-aryl-N'-cyanisothiourea-salts proved to be inactive against the tuberculosis bacteria. There are 2 tables, and 13 references, 1 of which is Slavic.

ASSOCIATION: Ural Polytechnic Institute (Ural'skiy politekhicheskiy
Card 2/3 institut)

On Some Aryl Derivatives of Cyanogen Thiourea

79-1-42/63

SUBMITTED: December 20, 1956

AVAILABLE: Library of Congress

Card 3/3

1. Chemistry 2. Thiourea-Synthesis 3. Cyanogen

KLYUKOV, M.S., inzh., retsenzent; ~~CHMRKASOV, V.M.~~, dotsent, red.;
SEREDKINA, N.F., tekhn.red.

[Resources of raw materials for the production of polymers;
collected articles] Syr'evaia baza dlia proizvodstva polimerov;
sbornik statei. Sverdlovsk, TSentr.biuro tekhn.informatsii,
1959. 41 p. (MIRA 14:4)

1. Russia (1917- R.S.F.S.R.) Sverdlovskiy ekonomicheskii
administrativnyy rayon. Sovet narodnogo khozyaystva.
(Polymers)

5.3700B

S/079/60/030/007/011/020
B001/B067 82297

AUTHORS: Cherkasov, V. M., Vladimirtsev, I. F.

TITLE: Double Aryl-diazonium Chlorides of Niobium and Tantalum

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 7,
pp. 2235 - 2238

TEXT: No alkyl- and aryl-organo-metallic compounds have hitherto been obtained for niobium and tantalum as well as for most of the transition metals. The data given in Refs. 1-3 on this subject must be doubted. Organo-metallic compounds of vanadium, niobium, and tantalum which were obtained by the diazo method have hitherto not been described. The aim of the present paper was to synthesize double aryl-diazonium salts with niobium and tantalum pentachlorides. To explain the effect of nucleophilic and electrophilic substituents on double diazonium salts, diazonium chlorides with various aryls were used for the reaction with niobium pentachloride. According to data (Refs. 5,6) published on the strong tendency of $NbCl_5$ toward hydrolysis under the formation of $NbOCl_3$,

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Double Aryl-diazonium Chlorides of Niobium
and Tantalum

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double diazonium salts of niobium oxychloride resulted instead of the expected double diazonium salts of niobium pentachloride. The o- and p-anisyl-diazonium salts and NbCl_5 were taken at a molar ratio of 2 : 1.

Thus, the stable double salts $(\text{CH}_3\text{OC}_6\text{H}_4\text{N}_2\text{Cl})_2, \text{NbOCl}_3$ with the coordina-

tion formula $\left[\text{CH}_3\text{OC}_6\text{H}_4\text{N}_2 \right]_2^+ \begin{bmatrix} \text{O} & \text{Cl} \\ \text{ClNbCl} \\ \text{Cl} & \text{Cl} \end{bmatrix}^{2-}$, and with the coordination number X

of niobium were obtained. The double salt of phenyl-diazonium chloride with niobium oxychloride $(\text{C}_6\text{H}_5\text{N}_2\text{Cl})_3 \cdot \text{NbOCl}_3$ was obtained at a ratio of

2 : 1 of the initial products. The ratios 3 : 1 and 1 : 1 yielded salts of unstable composition. For the salt $(\text{C}_6\text{H}_5\text{N}_2\text{Cl})_3 \cdot \text{NbOCl}_3$ two coordina-

tion formulas were suggested. Substitution of hydrogen by the nucleophilic group CH_3O in phenyl increases the stability of double diazonium

salts with NbOCl_3 whereas on the introduction of the electrophilic

group NO_2 no double salt is formed at all. Under equal conditions, no

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Double Aryl-diazonium Chlorides of Niobium
and Tantalum

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double aryl-diazonium salts are formed with tantalum pentachloride.
There are 11 references: 8 Soviet and 1 German.

ASSOCIATION: Ural'skiy politekhnicheskii institut (Ural Polytechnic
Institute)

SUBMITTED: July 16, 1959

X

Card 3/3

ACC NR: AP6029835

(A)

SOURCE CODE: UR/0073/65/032/008/0861/0863

AUTHOR: Cherkasov, V. M.; Dashevskaya, T. A.; Baranova, L. I.

ORG: Institute of Organic Chemistry, AN UkrSSR (Institut organicheskoy khimii, AN UkrSSR)

TITLE: N,N-Dichloro-N',N'-disubstituted sulfamides

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 32, no. 8, 1966, 861-863

TOPIC TAGS: dichlorodialkyl sulfamide, dialkyl sulfamide chlorination, chloro-alkyl phosphozo compound, dichloride, sulfur compound, chlorination, substituted amide

ABSTRACT: Chlorination of N,N-disubstituted sulfamides in 1N solution of NaOH at temperatures from -10 to -20°C yielded the previously unreported N,N-dichloro-N',N'-disubstituted sulfamides $R_2NSO_2NCl_2$. Composition and physical constants of the new compounds are given in Table 1.

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